

BETWEEN TWO STOOLS: BROADBAND POLICY IN SOUTH AFRICA¹

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ABSTRACT: This paper explores the underlying causes of South Africa's relatively poor broadband penetration despite Government's acknowledgment of its centrality to a modern economy and information society. South Africa's broadband policy has emerged from two apparently contradictory policy approaches. Until these are resolved, the sector will remain inert between two strategies, unable to move forward on either. On the one hand, broadband has evolved within the context of "managed liberalisation", a local adaptation of the international telecommunications reform model. This has created a market structured around a number of vertically integrated operators, fixed and mobile, whose services have evolved to offer broadband. The latest phase of this model is expressed in the Electronic Communications Act which came into force in 2006 and reforms the regulatory and licensing framework to address the challenges of convergence. Within this context, broadband uptake has been relatively poor and costs of ADSL and mobile HSDPA services remain high as a result of limited competition and ineffective regulation. This has prompted Government to adopt another strategy, in parallel with its current reform process. It has initiated a fully state-owned broadband operator, which is also expected to address the high cost of international cable bandwidth currently provided exclusively by the incumbent. This paper examines the underlying reasons for the development of these two potentially contradictory processes and their institutional arrangements to assess the implications for the achievement of national policy objectives on broadband extension.

BACKGROUND

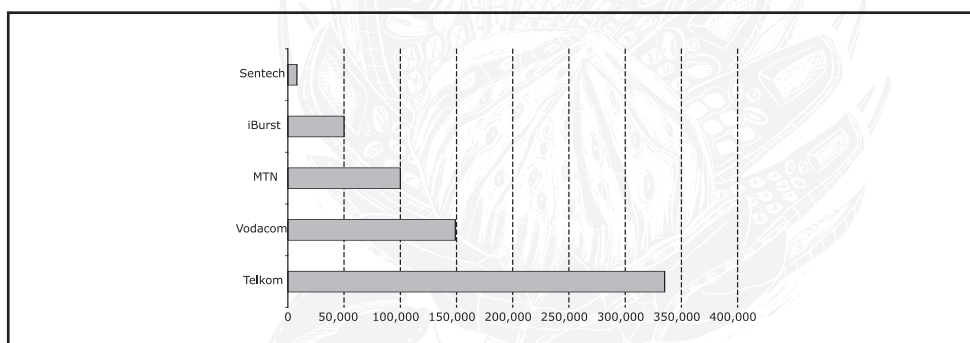
This paper seeks to explain South Africa's relatively poor broadband performance as the latest in a series of unintended policy outcomes of sectoral reform over the last decade. To underpin this analysis, this section provides an overview of current broadband penetration in South Africa.² Despite massive growth in mobile services over the last decade and initial rapid take up of Internet services, South Africa now lags behind many of its traditional competitors on key policy indicators of access and affordability.³ The country is rapidly being overtaken in a number of areas by other African states. Morocco, for example, in 2006 had more fixed broadband connectivity than South Africa – 325 000 compared to less than 200 000 – and the Tunisian mobile market is the fastest growing in Africa – apart from the island states (ITU 2006 Esselaar & Gillwald, 2007).

¹ The author would like to express her gratitude to Dr Tracy Cohen for her contribution to the paper and to Steve Esselaar for updating the data drawn extensively from the 2007 *South Africa Sector Performance Review* co-authored with the author. Any errors or omissions however, remain the fault of the author.

² This overview draws largely from the 2007 *South African Telecommunications Sector Performance Review* (Esselaar S and Gillwald A 2007) www.researchictafrica.net

³ See Southwood (2006a).

FIGURE 1: BROADBAND MARKET SHARE

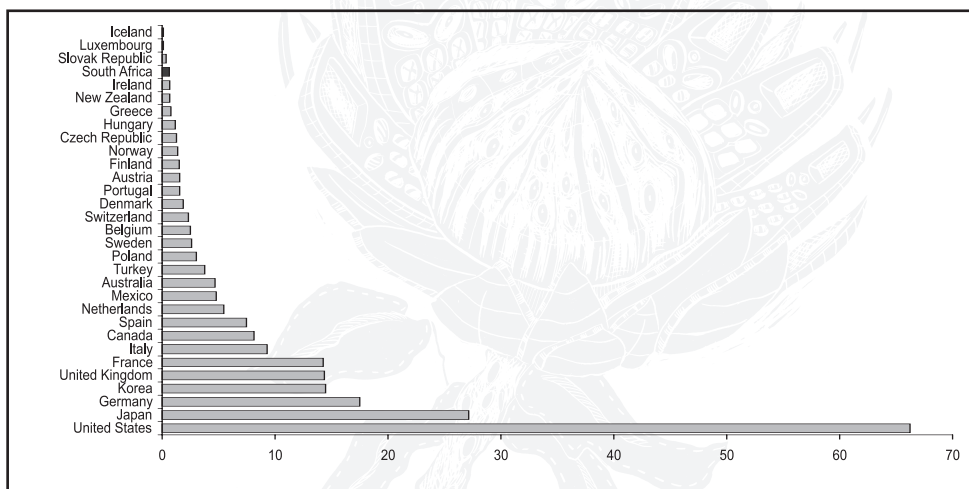


Source: *Sunday Times*, 2006

Telkom's 2006 results indicate that while there has been take-up of its broadband services, there is still a waiting list of over 50 000 residential subscribers for its ADSL service.⁴ While wireless competitors have certainly leveraged supply side delays with the roll-out and early introduction of mobile HSDPA services, ADSL growth has recently expanded again to counter the rapid uptake of mobile broadband services and still has a significant lead over mobile services. Independent broadband wireless access providers such as iBurst have also been able to leverage the prevailing conditions to their advantage and marginally improve the competitive take-up of data services. Virtually all competitors advertise short delivery times and in some cases, considerably lower prices (Esselaar & Gillwald 2007). Despite a promising start, being first to enter the wireless data market, the state multimedia operator Sentech's My Wireless broadband product was plagued by the challenges of entering the retail market and under-financing. The service eventually petered out with less than 20 000 subscribers. In spite of installation delays and relatively high prices, Telkom nevertheless dominates the broadband market with over two-thirds market share. This translated into over 300 000 subscribers in mid-2007. Yet notwithstanding these innovations, South Africa continues to lag behind global take-up of broadband services as can be seen in Figure 2 (Esselaar & Gillwald, 2007).

⁴ See *Sunday Times* (2006).

FIGURE 2: OECD BROADBAND SUBSCRIBERS COMPARED TO SOUTH AFRICA



(Esselaar and Gillwald 2007 adapted from OECD).⁵

The relatively slow uptake of broadband has consequently had a negative impact on Internet penetration in South Africa. While the flattening out of Internet access is in line with trends in other parts of the world, this is due to much higher levels of market saturation than in South Africa. However, the high cost of access has meant that the market for services at that price has saturated more rapidly than it might have, if access and usage were cheaper.⁶ (Esselaar & Gillwald, 2007:23). This trend is likely to be replicated with broadband, considering the relatively high costs and bandwidth caps in place. Even with some competition in the broadband arena, South Africa still lags behind comparable lower-middle and middle-income countries in broadband penetration which will have to increase exponentially if South Africa is to unleash the potential of ICTs for economic growth and development (Esselaar & Gillwald, 2007).

RESEARCH PROBLEM

This paper seeks to explain why broadband penetration in South Africa lags behind many other comparable countries, such as the Czech Republic, Poland, Hungary, Turkey and how this occurred. Noting the South African Government's recent creation of a state-owned broadband company, Infraco, with its declared developmental

⁵ Although these are absolute numbers in millions they provide some indication of South Africa's relatively poor standing with a population of 45 million in comparison with other countries with lower-middle and middle-income countries such as Poland, Hungary, Czech Republic and Turkey.

⁶ See Goldstuck (2005)

rationale to remedy the situation, this paper will examine whether this is the best or as has been claimed by Government the only strategy likely to achieve ubiquitous affordable bandwidth.

There is considerable evidence that the applications of the international reform model for telecommunications can extend the range of services, drive down prices and promote innovation. The market is assumed to be a superior means of efficient resource allocation to that of state decision-making and the model seeks to transfer investment risk from the public sector to the private sector through the privatisation of state telecommunications assets and the liberalisation of traditionally monopoly markets. The model also proposes an autonomous sector regulator to manage these processes through economic and social regulation to ensure public interest outcomes. This requires a separation of powers and activities between policy formulation, policy implementation and telecommunications operations. Policy formulation is assumed to be the democratic prerogative of Government, but telecommunications networks were required by the model to be separated from the state, at least through incorporation, or privatisation. Policy implementation is delegated to an agency autonomous of both state and industry, to impartially regulate the sector. Where this model has been comprehensively and systematically implemented, positive outcomes have been produced.⁷

Over the last decade, South Africa has embarked on a sector reform policy based on the notion of “managed liberalisation”. This policy seeks to preserve a central role for state-owned operators in the sector and state shareholding in private companies, while gradually liberalising the market over a period of time. This policy has been largely unsuccessful and its failures have been attributed to the uneven implementation of the reform model, particularly liberalisation and autonomous regulation. Economic analyses have highlighted the causes of high prices and poor penetration in the South African market (Erwin, 2007; Hodge & Ayogu, 2002; Melody, 2001). International experts have identified the reasons for the constrained private investment environment and the negative impact on investment. (Kelly, 2005; Reynolds, 2005). Adverse institutional arrangements, particularly the lack of

7 It is sometimes argued that this model has been successful primarily in OECD countries. However, it is impossible to conclude from this that it could not be successful in developing countries, as the systemic application of the policy model has been applied in very few developing countries to ascertain if it works or fails in that context. In India, for example, where competition has been introduced in the mobile market, prices have fallen dramatically. This has also been as a result of effective regulation of interconnection, rather than price, to enable fair competition (See LIRNEasia. Six Country Study 2006-2007: India Report, *World Dialogue on Regulation Discussion Paper* 0703.)

autonomy and resources of the regulator necessary to the creation of a conducive investment environment and effective regulation, have been laid bare (Gillwald 2003). The media have lamented the constraints on market entry and bemoaned the resultant high cost of services ((McLeod, 2007c); (Vecchiatto, 2004); (Stones, 2006).⁸ The head of the Competition Tribunal, David Lewis, responded to the South African Minister of Public Enterprises Alec Erwin's contention at the 2007 World Economic Forum that "markets had not worked in telecommunications" by stating that the problem was not that markets did not work but rather that in South Africa there were not working markets (Vecchiatto, 2007).

This raises the question of why in the face of apparently incontrovertible evidence, a democratic state with a clearly articulated understanding of the centrality of a well developed "infostructure" to any modern economy, effective citizenry and economic participation, has resisted the implementation of key elements of the reform strategy which evidence suggests is the most effective way of delivering services? It further raises the question of why the state has not pursued its own sector policy designed to achieve this result?

To understand this, the next section provides the context of the current political economy in which to locate state-sector relations. It tracks the emergence of the "developmental state" and its manifestation in the telecommunications sector. The tensions between the new strategies of the developmental state in the sector and the existing sector reform model are highlighted. The paper then focuses on the sector level to examine the uneasy implementation of the sector reform model over the last decade and the unintended outcomes of its uneven execution, through an analysis of the institutional arrangements and market structure that arise from the policy framework. Designed to ensure the preferred outcomes of the state, the institutional arrangements have impacted negatively on the performance of the sector. This paper argues that high cost of broadband and the resultant poor penetration are the current expression of these trends also evidenced in earlier services. This historical contextualisation explains, though does not justify, the intervention of the state,

8 Paul Cole, a consultant commissioned by the Universal Service and Access Agency of South Africa, has estimated that South Africa's policy of managed liberalisation meant that consumers have paid US\$586 million more than they should have for services, and deprived the country of US\$2.23 billion of social benefits in the course of just one year. He argues consumers are paying 440 times more than they should for voice and data services and foreign investors are staying away because of South Africa's slow and expensive communications and extra expenditures on telecoms by consumers. When the research began, Telkom's Surfmore Internet package was 55 times more expensive than a similar service in the US (Stones 2006).

realising the strategic importance of broadband to the country, in the failures of the gradual reform of the sector. The analysis of the interplay between the state and sector institutions is then extended in the last part of the paper to analyse the state strategies emerging in parallel to that of the formal sector policy of “managed liberalisation”. The factors that led to the latest manifestation of these two strategies, the 2006 Electronic Communications Act and ICASA Amendment Act on the one hand and the state broadband company Infraco on the other are identified, their policy and regulatory implications considered, and their ability to address the country’s broadband deficit assessed.

SOUTH AFRICAN POLITICAL ECONOMY

The dichotomous strategies of the current phase of reform reflect the international trend towards liberalised, competitive networks and services on the one hand and the apparently contradictory developmental state strategy of state provisioning on the other. This mirrors the contradictions within national policy at the state level. Following the overwhelming electoral success of the ANC in 2004, President Thabo Mbeki flagged the intention of Government to shift state strategy for growth and development away from the neo-liberal line pursued in the previous term to what has increasingly become described by Government as the strategies of a “developmental” and interventionist state (Mbeki, 2004, 2006). Since the 2004 launch of the new macro-economic policy, the Accelerated and Shared Growth Initiative for South Africa (ASGISA), the centrality of state-owned enterprises to infrastructure expansion has been emphasised. The Minister presiding over the Department of Public Enterprises (DPE), Alec Erwin, enunciated the rationale for this strategy thus:

“...the private sector is inexorably impelled toward appropriating value for itself – that is why it is imbued with a feverish and oft-time self-consuming dynamism. This has a number of effects when the private sector gets onto the terrain of public goods. They will tend to cherry-pick the most profitable opportunities, maximise their rate of return and seek to shorten the payback period – all sensible practice for a private corporation...However this can create many public problems. It can mean that the overall infrastructure or delivery system can be weak and badly integrated or that important communities are under-served or poor people are impoverished further because of the cost of necessities is rising...we’ve identified key economic sectors as strategic and the companies operating in them require a stable strategic stakeholder that cannot be found in the private sector” (Erwin, 2004).

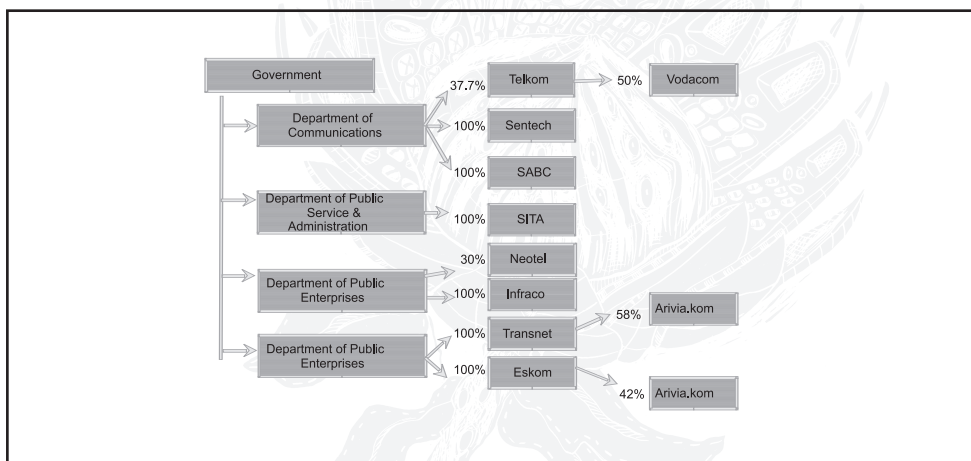
It was also during this time, that communications came to the forefront of the factors identified as constraining economic growth. In the *State of the Nation* addresses for the last several years, President Mbeki has critically focused on the high cost of communications and the negative impact of this significant input cost to businesses, its potential for employment generation in the service industry and particularly business process outsourcing (Mbeki 2004, 2006). Information and Communications Technologies (ICT) has also been identified by the Deputy President as a cross-cutting sector within ASGISA which could accelerate growth. (Mlambo-Ngeuka, 2006a) She has also flagged ICT infrastructure as a site of state investment that would be accompanied by

“... a strategy to rapidly grow South Africa’s broadband network; implementation of a plan to reduce telephony costs more rapidly; the completion of a submarine cable project that will provide competitive and reliable international access, especially to Africa and Asia, and the provision of subsidies to encourage the establishment of call centres and labour intensive business in poor areas...” (Mlambo-Ngeuka, 2006b)

In her Budget vote in May 2006, Minister Matsepe-Casaburri confirmed that the Department of Communications (DoC) “would be anchoring our work within this Government agenda ... to meet certain socio-economic development objectives by 2014. The ICT sector has a critical role to play in achieving the goal of at least six per cent growth as stated in [ASGISA]. Investment in ICT broadband infrastructure is central to achieving the objectives” (Matsepe Casaburri, 2006).

One of the major tenets of telecom reform globally has been the shifting of the risk of investment from the public sector to the private sector. This frees up resources for investment in other developmental areas such as social investment and welfare. In South Africa however, despite a formal policy of incremental liberalisation in the communications sector, following the privatisation of Telkom in 1997, there has been increased, rather than decreased, state ownership and investment. The reluctance to relinquish state ownership in the sector has been clearly discernible over the last decade. This is early privatisation of publicly owned radio stations, the incumbent telecoms company and the tentative liberalisation of the broadcasting and telecommunications sectors. The state has secured an ownership stake in virtually every new major opportunity in the sector, such as the second fixed-line operator licence and the granting of a multimedia licence by statute to the state-owned signal distributor, Sentech. After a decade of reform the sector has extraordinarily high levels of state ownership, dominating broadcasting, signal distribution, telecommunications, as well as significant ownership in the IT sector as reflected in the figure overleaf.

FIGURE 3: GOVERNMENT OWNERSHIP



Source: Esselaar and Gillwald (2007)

This has occurred despite the official sector policy evolving in line with the global liberalisation approach. The decision by the state to re-enter the sector not simply as a “custodian”, as would be supposed by any reform model, but as Peter Evans (1995) categorises it – “demiurage”, the actual provisioning by the state – appears to have caught stakeholders and commentators by surprise.⁹ Despite the state reneging on privatisation and liberalisation undertakings in other sectors, most notably electricity after 2001, the telecom sector was perceived to be on a policy trajectory toward full liberalisation that was already too far underway to reverse. The emerging view of Government however – rationale for this *volte face* – was that a broadband backbone was a key strategic infrastructure for a modern economy, the control of which should not be in foreign hands. Moreover, “the private sector had failed to make investments required to meet South Africa’s growth and developmental imperatives” (Erwin, Alec. 2007. Interview. London. 12 July).

9 Despite arguing for a strong state – rather than a large state – Peter Evans says: “The annals of demiurage are littered with massive and conspicuous failures” (1995:80)

TELECOM REFORM IN SOUTH AFRICA

Despite a formal commitment to the orthodox reform model in the 1996 White Paper for the sector,¹⁰ the subsequent actions of the Government and the Ministry of Communication reflect a long standing unease with the market and autonomous regulation as mechanisms of reform. This is echoed in Minister Erwin's clearly articulated distrust of the market to deliver in certain areas. The two parallel policy strands within the telecoms sector should not however, be understood as a struggle between one department pursuing a market reform model and another, a more statist strategy. The failure to implement certain central legs of the international model and the clawing back of some of the necessary delegated powers and time frames by the Ministry of Communications in several rounds of legislative reform over the last decade, meant the model was never comprehensively applied. Its partial implementation has evolved into the policy of "managed liberalisation" a label reflecting the ambiguity of the state to the reform process.

This process started with the 1996 White Paper, which adopted the orthodox reform strategy of the late 90s with its focus on privatisation, liberalisation of certain market segments and the establishment of a sector regulator. This was quickly translated into law as the Telecommunications Act of 1996 which was amended in 2001 to deal with some of the issues emerging with the legal expiry of the incumbent's monopoly specifically the introduction of competition. Telkom's exclusivity came to an end however, with no competitor in sight as the regulator, bound by the criteria set by the Ministry in the invitation to apply for a second network operator (SNO), found no suitable bidders in two rounds of hearings. However, simply the talk of the broadband offerings to be available by the competitor in the application hearings, spurred Telkom into action and in 2003 it introduced an ADSL service, which it had long delayed. This is believed to be because it feared ADSL would cannibalise its ISDN services, which had seen poor take-up due to high pricing and had therefore not been fully amortised.¹¹ But delays in the licensing

10 The 1996 White Paper on Telecommunications was the first post-apartheid sector policy process to be undertaken. This reflected a high level of consultation taking place in the shadow of the broader reform process underway. See Robert Horwitz, *Communications and Democratic Reform in SA* (Cambridge University Press; 2000). This level of consultation has dwindled slowly over the years of policy reform in the sector, to the extent that the Electronic Communications Act made its passage through Parliament in the absence of any policy reference point.

11 Like most of Africa, South Africa has no traditional cable access options for Internet and broadcasting services. From the fixed line perspective, dial up access was improved by ISDN (Integrated Services Digital Network), offering speeds of 128Kbps, which has since been largely replaced by ADSL rollout. Telkom has ADSL offerings of up to 4Mbps.

process meant that the fixed line competitor later to become known as Neotel, only became operational with a very limited corporate service offering in mid-2006. Other delays were due to shareholder wrangling as a result of the forced corporate structure aimed at addressing the state's need to ensure the participation of its transport and electricity utilities, and an equity set aside for black economic empowerment. Consequently, the potentially competitive benefits of market reform are not evident more than seven years after the official end to Telkom's monopoly. Its persistent dominance of the market continues to constrain the competitive services segment of the market and access and usage at the retail level.

Hope of relief from the doldrums in which the sector found itself by 2003 arose with the hurried initiation of the convergence policy process by the Department of Communications, despite the incompleteness of the previous phase of reform, particularly the lack of competition for Telkom.

With a presidential review of a decade of democratic Government, the assessment of the performance of ministries and departments prior to the elections looming in the first quarter of 2004 and the Director General's own five-year contract coming to an end, the Department of Communication had leapt into action. The haste with which this was executed and the cursory public and administrative processes was evident as the legislative process stalled in 2004, when the Convergence Bill was returned to the Department of Communications by Parliament and appeared to go into abeyance together with industry's optimism. Industry's spirits were lifted again by an unexpected announcement of interim policy directives in September 2004, the day prior to the gathering of the fourth Presidential International Advisory Council on ICT policy. These Directives were the most profound indication of a positive move towards liberalisation in various areas of the sector, as they lifted many of the legislative restrictions contained in the 1996 Act.¹² However, just prior to the Directives becoming effective in February 2005, the Minister of Communications withdrew the right of value added network service (VANS) operators to self-provide facilities. This announcement, made via press release, was in clear contradiction to the earlier interpretation of the directives provided by the regulator in the absence

12 In summary, the Ministerial Directives provided that mobile operators may utilise or self provide any fixed lines required for the provision of their services; that Value Added Network Service (VANS) providers may carry voice using any protocol; that VANS may also be provided by means of telecommunications facilities other than those provided by Telkom and the Second National Operator (SNO); that VANS could cede or assign the right to use, or sublet facilities; that private telecommunications network (PTN) operators may resell or sublet spare capacity and facilities and that the public pay phone services market would be liberalised through a licensing process.

of clarity from the Department. In 2005 the revised Convergence Bill was presented to Parliament again and was finally passed in 2006 as the Electronic Communications Act, followed shortly thereafter by the ICASA Amendment Act. These legislative reforms ushered in the third phase of reform in a decade.

POLICY OUTCOMES

Despite the heady start to the reform process in mid-nineties the unintended outcomes of a decade of “managed liberalisation” has resulted in South Africa’s steady descent down many international information communication technology indices¹³ with static fixed line growth and relatively poor broadband take up; relatively high retail and wholesale prices; very limited foreign direct investment in the sector in relation to the size of the market and in comparison with other emerging African markets such as Nigeria (Esselaar and Gillwald 2007). It has created a market structured around a vertically integrated incumbent, permitted to compete downstream against competitors with the legacies of them having been required by law to acquire their facilities from the monopoly upstream component still evident in their dominance of nearly all market segments (Gillwald, 2005). The decisions by the Competition Commission over the last few years against Telkom and the imposition of maximum penalties are testimony to the anti-competitive incentives this market structure has created.

Moreover, the institutional arrangements for the sector impeded the regulator from correcting anti-competitive behaviour despite considerable efforts. These created a conflict of interest within the Ministry between its function as policy maker for the sector and that of majority shareholder in the incumbent, even after privatisation and incorporation. This together with the absence of capacity and capabilities within the regulator has often rendered the strategies for the sector impotent. Although the Electronic Communications Act (ECA) has the potential to address some of the negative outcomes of the first decade of policy reform, in the absence of a policy framework in which to locate the Act, there remains no clear vision for the sector, nor any overarching ICT policy framework for the country.

13 Despite the overall growth of the ICT sector, South Africa continues to lag behind in international comparisons. While the incremental movements downwards are not dramatic, they indicate an inability by the country to harness the potential of ICTs for economic growth and development as articulated in various national policies and strategies. The World Economic Forum (WEF) presently ranks South Africa at 45th for overall economic competitiveness, having fallen from 40th position. The WEF also measures the “networked readiness” of countries, which is a measure of ICT capability. South Africa was ranked 37th in 2005/6, and has fallen to 47th in 2006/7. (<http://www.weforum.org>).

Yet, there has never been any acknowledgement of these negative outcomes from the department responsible for policy. Former Communications Department Director General, Andile Ngcaba, believes his legacy has been a positive one. In his opinion South Africa has been at the cutting edge of international reform, leading privatisation, regulatory reform, electronic commerce and convergence initiatives not just on the continent but globally (Ngcaba, Andile. 2006. Interview. Johannesburg. 2 May). The current Director General, Lyndall Shope-Mafole views policy as having been good but acknowledges implementation weaknesses. (Shope-Mafole, Lyndall. 2007 Interview. Pretoria.) However, the indisputable implementation failure must at least partially have been a result of the policy choices made and the failure to factor into policy decision the absence of institutional endowments and capabilities to regulate effectively.

The latest response of the Department of Communications to the policy outcomes of the last decade has been the development of a three-year strategic plan. One focus area of the plan is the development and implementation of a broadband strategy. The actual mechanism to achieve this is not clear from the strategy document nor is the strategy's relationship to either the e-Strategy Task Team, a statutory body created by the Electronic Communications and Transactions (ECT) Act of 2002 (and required to report within two years of its establishment but which has not) nor the Presidential National Commission on the Information Society and Development (PNC-ISAD) established by the president to develop a national ICT vision and to integrate ICT initiatives across Government. There remains no public vision or new policy framework to integrate these initiatives or reconcile the two increasingly divergent policy strands that have become evident in recent years. (Esselaar and Gillwald 2007). However, the Director General, Lyndall Shope-Mafole, has indicated that within the context of the developmental state, the cabinet clusters were working on a programme of action led by the Departments of Public Enterprises (DPE) and Public Administration that prioritised ICTs (Interview Shope-Mafole, Lyndall. May 2007. Pretoria).

While the Department of Communications appeared to be in denial about telecommunications policy failures of the last decade, DPE was not. The Minister of Public Enterprises, Alec Erwin, at the 2007 World Economic Forum described telecommunications policy in the country as "a mistake". Unlike international and domestic commentators however, Erwin does not attribute these negative outcomes to the failures of "managed liberalisation" to adequately open up markets or establish effective regulatory framework but rather to the failure of markets to deliver in strategic areas. He has noted that:

“It is simply no longer possible to compete in the global knowledge economy without low cost, reliable and widely available bandwidth. There are businesses which could exist in our economy and do not because we have bandwidth costs that they cannot absorb. South Africa’s economic growth remains constrained by patchy, high cost broadband availability. This excludes key stakeholders from full participation in this important domain of global activity. Whether in education, research and innovation, business process outsourcing, leading edge design and access to services, our model can no longer depend on the environment of the early to mid 90s” (Erwin, 2007).

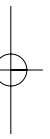
He concurred there had not been just regulatory failure but policy failure, but he argued that policy failure in this area has been common around the world.

“We were preoccupied with trying to address all the smart things. What we failed to do was say you need broadband capacity, how do we force investment in it... The mistake we have made is not having the courage of our convictions. Why get confused with all the expertise, because of that we gave too much space to Telkom, we did not distinguish regulatory and ownership functions, there were a range of policy mistakes in telecoms...” (Erwin, Alec. 2007. Interview. London. 12 July.)

Apparently frustrated by these negative policy and regulatory outcomes in the telecom sector, Government, through the DPE, which is responsible for spearheading the use of state enterprises to drive growth and job creation, announced in 2006, without any public consultation or apparent reference to the prevailing sector policy – unclear as it had become – the establishment of a state-owned entity, Infraco, to provide low-cost broadband facilities, in the absence of it being affordably available in the current regime.

INFRACO

With the dawn of a newly liberalised era in legislation through the Electronic Communications Act and ICASA Amendment Act, talk of Infraco emerged in August 2006 when Government decided to retain the power utility, Eskom’s telecommunications infrastructure and lease it to new entrant, Neotel, instead of selling it to them as originally planned. At an analysts briefing prior to the public launch of its services in 2006, Neotel managing director and Tata representative in Neotel, Ajay Pandey, indicated satisfaction with the arrangement as it would be able to utilise the advanced network without having to capitalise it. Neotel had already spent ZAR286 million purchasing Transnet’s high-capacity metropolitan fibre optic network. (Author notes from Neotel analysts briefing, Sandton, August 2006.) In the



the development of a massive African cable connecting to London and Brazil. (Erwin, Alec. 2007. Interview. London. 12 July).

With no direct reference to existing policy frameworks and processes, these developments in Public Enterprises raised more questions than answers. What would be the relationship between Infraco and the state owned multimedia licensee, Sentech? Despite its recent poor performance and inability to attract state funding Communications Minister Ivy Matsepe-Casaburri had announced only a year earlier in her 2006 budget speech that Sentech was to become the national strategic broadband operator. With the shift in emphasis in her 2007 budget vote to Infraco, political parties on the Parliamentary Portfolio Committee on Communications bemoaned the lack of support, by the Department, of Sentech's requested funding. Committee acting chair, Godfrey Oliphant likened it to Government having two wives, namely Infraco and Sentech. "A man cannot take a second wife, if he neglects the first one," he said (Vecchiatto, P. 2007 b). Erwin however emphasised that Infraco would only provide bulk broadband capacity on its fibre optic network. Sentech would focus on addressing delivery needs in Government and the broad public sector via wireless (non-fibre cable) systems. Sentech, according to Erwin, would prioritise education and health centres (Joffe, 2007).

Erwin has been at pains to point out that Infraco is not a telecoms operator but is strictly a supplier of broadband capacity between cities and between South Africa and the rest of the world. (Erwin, Alec. 2007. Interview. London. 12 July.) Further, he rejects assertions that another state-owned entity may have negative consequences in a liberalising sector which the ECA had just been passed to enable. He claims that Infraco will create efficiencies in the use of a common infrastructure and fast track the emergence of a globally comparable ICT market while addressing affordability at the right tier of supply of international and national connectivity. (Erwin, Alec. 2007. Interview. London. 12 July.)

Erwin concedes that the sector has been badly regulated and that the services market should have opened up more quickly. This however would not have solved the problems of backbone investment and roll out, he argues, as backbone and last mile investment would not have taken place in poorer areas if left to the market who would have serviced only the lucrative domain. (Erwin, Alec. 2007. Interview. London. 12 July.) Expressing a clear scepticism for the market to deliver services, he cites both Telkom's delivery and Neotel's business plan, to demonstrate that the private sector has underinvested and that Government has had to step in as the market, increasingly growing risk averse, were seeking short term gains where long

term sunk investments were necessary, and could not take the right decisions. (Erwin, Alec. 2007. Interview. London. 12 July.)

“To handle core infrastructure right, it has to be the state. Because I’m not a VSNL making a decision on the basis of global conditions about where to invest that have little to do with SA. We cannot be held hostage to these kinds of complex market decision about investment...and I would not agree about the development state (not having the capacity to make these choices and implement them) ...there is a strong political movement and it can take these decisions. We are moving in and saying we can do it: the economy needs it. We cannot be held hostage by arguments. The reasons we are doing so badly is that we kept being held hostage by all sorts of arguments.” (Erwin, Alec. 2007. Interview. London. 12 July.)

Erwin also noted that one of the drivers of the broadband initiatives was the inability of current investments in networks to fulfil national commitments and objectives, such as the international bid for the square kilometre array telescope potentially to be located in South Africa and the type of communication infrastructure required to deliver South Africa’s commitments to FIFA for the hosting of the 2010 Soccer World Cup. Pressed on alternatives, Erwin agreed in principle that the unbundling of Telkom may have been a more affordable way for the country to achieve goals of affordable access, but “to enter in to those debates now would have tied us up in knots for ever.” That was not to say Telkom is any longer a strategic asset for the state he added, and he did not rule out the option of buying back Telkom assets in the future.

“My own view, which has not changed, is that really the spine – the fibre optic backbone and signalling system – is a classic public good, that the state has to invest in it to optimise it. The rest of the sector is so dynamic, let everyone else play on top of that and do what they want.” (Erwin, Alec. 2007. Interview. London. 12 July.)

It should be noted however, that irrespective of Government’s rationale and intentions underlying Infraco, from the users’ and consumers’ point of view anything that might bring down the exorbitant cost of communications has been cautiously welcomed (Smuts, Dene MP. Interview. Cape Town, November 19, 2007). There has however been confusion and concern in the market about the advent of another state owned enterprise in the telecoms sector. As some analysts have noted: “With 100% ownership of Sentech, a 38% stake in Telkom and 30% stake in Neotel through Eskom and Transtel and now with a majority ownership of 74% in Infraco, Government is viewed as being keen not to liberalise the telecommunications market but rather to dominate it” (Lunsche & Singh, 2007).

Having outlined the policy context and political economy in which these potentially conflicting sectoral policies and reforms co-exist, the next section considers the legal and regulatory implications of Infraco as a further example of the inadequacy of the institutional and governance arrangements in the sector.

LEGAL AND REGULATORY IMPLICATIONS

A number of questions have been raised regarding the legality of licensing Infraco in the recently reformed regime. This has paralleled perceptions that the Department of Communications appeared to have been sidelined by Public Enterprises. The opposition member on the Parliamentary Portfolio Committee on Communications, Dene Smuts, described Alec Erwin as the “second minister of communications” noting the perceived incompetence of the Minister of Communications (McLeod, 2007a). Yet, in the context of these criticisms, the Communications Department began to demonstrate its support for Infraco, even if it appeared this was not always co-ordinated with Public Enterprises. This apparent lack of policy co-ordination was also created by the complexity and reality of how the licensing process envisaged by the Electronic Communications Act was developing and how existing and new licences were to be granted: what criteria were to be used; what standard terms and conditions would pertain; when licences would be issued and what specific commitments infrastructure licensees would have to undertake. While Public Enterprises was responding to media enquiries about how it would become operational given that Infraco would have to apply for a licence, the Communications Director General, Lyndall Shope-Mafole, announced that Infraco already had a licence which was issued as part of Neotel’s licence, and hence was catered for under the transitional provisions of the ECA. She suggested that Infraco was already operational and was currently leasing infrastructure capacity to Neotel. Icasa, she added, had been tasked with unbundling the licence before the end of 2007 but she added Infraco did not need to wait for Icasa to unbundle the Neotel licence. “We will go through a licensing process that separates the (second network operator) SNO licence from the infrastructure licence.” Shope-Mafole said the regulator thought this quite feasible though the regulator itself appeared unclear about how it could license the entity within the new legal framework. With apparently little regard for international perceptions of this extraordinary licensing intervention, the Minister of Communications indicated in her Budget Vote Address in May 2007 that she would be “requesting” the regulator to issue a licence to Infraco (Matsepe-Casaburri, 2007).

In May 2007, the Department of Public Enterprises released the Infraco Bill for public comment, but with the company already established and the modalities already decided, the consultation process seems somewhat of a formality.¹⁵ This was reflected in Minister Erwin's expressed frustration with the confusion caused by previous consultative processes in the communications sector. The Infraco Bill he said, would start the process of formalising the entity and would be accompanied over the following months by the development of stakeholder compacts and business plans to ensure the efficiency and performance of the new entity. (Erwin, Alec. 2007. Interview. London. 12 July.) The Bill provided for the legal form and structure of Infraco and (frustrated with the confusion over its licensing) included a highly contested licensing provision for its establishment. Following two rounds of public hearings, the licensing provisions in the Infraco Bill were moved into a separate Bill to amend the Electronic Communications Act, with the specific aim of allowing Government to "make strategic interventions on infrastructure investments whenever it deems necessary" and to provide for the "efficient licensing of state owned entities". Public hearings were held in November 2007 and the Amendment Bill currently awaits presidential assent. At the centre of the licensing debate is the fact that the sector governing legislation the ECA incorporates a mechanism via policy direction from the Minister, to immediately license Infraco, albeit on a non exclusive basis.¹⁶ The effort to bypass the use of this enabling licensing provision in the ECA and the regulatory arrangements it envisages, and the speed with which this has been completed, suggests that Government is intent on licensing Infraco on its terms which for now, preclude multiple infrastructure competitors.

Despite these concerns about increased state ownership within the sector and the messages being sent witting or unwittingly to international investors about the arbitrary nature of telecommunications governance in the country, Erwin's commitment to ensuring that public enterprises be restructured to drive growth and development and his success in strengthening their management and Boards of Directors, recapitalising them and giving them an unequivocal mandate to play a strategic role in the economy, has, at least in some quarters, sparked some optimism about the possibility of affordable broadband in the near future.

15 See Government Gazette No. 30307 of 17 September 2007.

16 Section 5(6) provides that: "In consideration of the implementation of the managed liberalisation policies, the Authority may only accept and consider applications for individual electronic communications network services licences in terms of a policy direction issued by the Minister..."

This section revisits the evolving sectoral policy process of 'managed liberalisation' and in particular its latest legal developments to see whether it is able to ameliorate the unintended policy outcomes of the past and enable the latest sector advances such as broadband, which demand considerable investment in network development. The recently enacted Electronic Communications Act (ECA) has the potential to address some of the policy and regulatory barriers that have hampered the growth of the sector over the last decade and that of broadband most recently. The counterpart legislation, the ICASA Amendment Act of 2006 which deals with the institutional arrangements between the Ministry and the regulator and its operational framework, is less forward looking and perpetuates certain legal issues even if through different mechanisms. While the Act removes some of the legal constraints that allowed the Ministry to veto regulations and ensure its preferred outcomes of licensing and regulatory processes and removes most of the structural conflict of interest in the previous institutional arrangements, a new structural conflict of interest point has been created.¹⁷ The powers of appointment of the decision-making body of the Authority, the Council, have been removed from the President on the basis of Parliamentary short-listing, and now reside with the Ministry. This extends the powers of the Ministry while it continues to be the largest single shareholder within Telkom. From this point of view the Act fails to ameliorate previous perceptions of potential political interference and the implications for investor risk assessment.

From a licensing point of view the Act seeks to provide a horizontal licensing framework to align with new market structures globally. It attempts to streamline the licensing process by introducing class licences on service licences and exemption to certain minor and non-commercial licences. The Act has the potential to adjust the currently inhibiting market, structured around vertically integrated incumbents and to facilitate easier entry into the market. This is however, dependent on an innovative implementation of the licensing regime and the reduction in the currently high regulatory transaction costs. This in turn, is dependent upon a capacitated regulator that is prepared to take calculated risks and to imprint its

17 A pervasive conflict of interest has pre-existed in the sector and continues to exist, which emanates from the dual role of the Minister as shareholder in various operators on behalf of the state and the repository of policy making for the sector. The ECA does not address this concern which can only be resolved through either policy making for the sector, or shareholding on behalf of Government in the various operators, being shifted to another Government department.

Likewise waiting for the regulator to implement the unbundling of the local loop or instituting the essential facility regulation that could open up the access to the landing stations and counter the monopoly on undersea cable controlled by Telkom and reduce the price of international bandwidth, which the new Act enjoins ICASA to do, will indeed take more time than South Africa has – certainly to meet its 2010 Soccer World Cup and square kilometre array (SKA) telescope commitments.

Just as eroding it took a decade, rectifying the unintended outcomes of the last decade of reform and restoring credibility to the policy and regulatory environment internally and externally, will be a long-term project. Delivering broadband as urgently as required therefore may well not be addressed in the short term by corrections to the implementation of the reform model, or by clarifying the institutional arrangements and building the capacity of the regulator and thereby reducing regulatory risk.

72

The creation of a state infrastructure carrier network company, to provide access to lower the cost of broadband facilities is an entirely feasible project. The processes by which this has been done however, and the consequences of the emerging institutional arrangements have their genesis in a lack of public consultation and remain indifferent to the prevailing policy, market structure and licensing framework for telecommunications. The failure to reconcile this new state broadband strategy with the existing policy of “managed liberalisation”, creates further sector instability and investor insecurity. The absence of policy coherence between these two currently parallel but potentially contradictory policy processes was evident in the remarks by the two Government departments on the Infraco licensing process. Also evident in the intention to force Infraco into being by DPE, is its failure to acknowledge Infraco’s entry into a regulated competitive environment unlike other state-owned infrastructures.

The result is that the conflict of interest created by state ownership of Infraco under conditions of weak, ineffective regulation are replicating those that have plagued the sector to date with the state continuing to be the dominant shareholder in Telkom. This is evident in the reluctance of the state, having committed hundreds of millions of rands to connect its own broadband company to the proposed New Partnership for African Development (Nepad) undersea and land cable network, to allow undersea cable competitors to land in South Africa and provide potentially cheaper bandwidth to consumers by devising a range of new threshold requirements for them to fulfill. Were it not involved in the cable, it would presumably have supported the landing of multiple cables to encourage competition and drive down prices as intended by the inclusion of essential facilities regulatory powers in the Electronic Communications Act. Were it not threatened by competition, the Department of Communications may have also been willing to use the mechanisms in the ECA to open infrastructure provisioning on a competitive basis and avoid a legislative amendment now required to bypass that provision and license Infraco.

As recent undersea cable developments across the continent show, business has been willing to make investments offshore where risks seem more limited and returns more promising. However, where these projects have been initiated, Governments have become involved, potentially scuttling private initiatives and diminishing the chances of competitively driven lower prices for international bandwidth. On the basis of the negative experience of the club consortium ownership of SAT3, largely controlled by various African and international incumbents, Governments led by South Africa sought to determine the terms of an innovative

structuring of private, public and donor funding of an East African cable, East Africa Submarine System (EASSY), delaying the project for years and inducing waning interest in it (McLeod, 2007d).

A potential, privately owned, competitor, Seacom, also planning to link Asia and the eastern seaboard of Africa, has only been granted policy assent by the Department of Communications to land in South Africa if it has a majority South African shareholding. When Seacom was announced in July 2007, Neotel indicated that it would be partnering with it and that it would use Neotel's licence to land in South Africa. However, the Director General of Communications, Lyndall Shope-Mafole reiterated from a meeting of African Ministers in Rwanda late in 2007 that a decision had been taken by African Governments not to permit cable to land on the continent without majority African shareholdings. She said the time had come to end the ownership of telecommunications companies that extracted profits from the continent on the basis of the exorbitant prices which "our grandmothers" had to pay for (SAFM, 30 October 2007). The MD of Transtel, Ajay Pandey told the *Financial Mail* that he disagreed with artificial ownership constraints and warned that these would chill the significant capital investments required for such big projects (McLeod, 2007b). At a public briefing in November, Neotel confirmed its offering of international bandwidth and prices substantially below Telkom costs through its partnership with Seacom. (Author's notes from launch held at Helderfontein 15 November 2007).

CONCLUSION

Policy formulation in the telecoms sector in South Africa has been marked by the conflicting needs of the new state to build its credibility internationally by adoption of global reform models, while at the same time, imposing its transformative agenda on the development of the sector, which it believes is only possible through state intervention and control (Langa, Mandla. 2006 Interview. Johannesburg. 1 November.) This policy dilemma is highlighted by an examination of broadband development in the country. The unilateral announcement of the establishment of Infraco, has turned the plodding policy of managed liberalisation and the associated market structure on its head.

What this paper has sought to demonstrate is that while on the face of it, it may appear to be a contestation over policy approaches, South Africa has been straddling two reform approaches, often in tension with one another and unable to deliver on either for sometime. This has been clear even before this latest intervention

motivated by Government rhetoric of the “developmental state”. While policy has evolved within the global context of market reform, Government has demonstrated through a range of political interventions, its unease with the market as a mechanism of reform and autonomous regulation as an oversight mechanism. To deal with these anxieties, Government has created formal mechanisms to ensure its preferred outcomes and where these have failed, it has resorted to executive intervention in licensing and regulatory processes (Currie, William. Interview Johannesburg 2007; Nyoka, Ncetezo Interview Johannesburg 2006.)

The outcomes of this bifurcated sector policy is an environment that has failed to create conditions conducive to investment and competitive delivery of the latest technological advances such as broadband that have the potential to enable economic growth and development. The implication of these contradictory strategies for telecoms as a potential driver of growth and development at a time when South Africa most needs it, are severe. The costs for the country of not having an effective policy able to deliver on national objectives and to meet the needs of a modern economy are high, as indicated by the Department of Public Enterprise’s intervention in the sector.

This action may be a short-term solution to meeting domestic needs and those of major international infrastructure commitments such as the 2010 Soccer World Cup and the square kilometre array telescope, but without addressing the more fundamental questions of the appropriate role of the state in this sector and creating the necessary institutional arrangements for the effective regulation of the sector, the contradictions within the system will persist.

What are the conditions, however, under which this will work and how can these be institutionalised to avoid replicating past failures resulting from state ownership and intervention?

It appears that South Africa is now engaged in a new round of state intervention to safeguard its assets in a competitive environment. This is motivated and justified under the rubric and rhetoric of the “developmental state”. The credibility of the country as an investment destination and its ability to deliver services is again being tested by the state’s conflation of the public interest with the interests of state enterprises. Such initiatives are not inherently good nor necessarily in the public interest simply because they are undertaken by state enterprises. If state enterprises are to be an active player in this sector, they need to be ring-fenced from those responsible for policy development in the sector and be subject to the same rules that pertain to all market players at this stage of reform. For this to be

enforced, a strong regulator is a necessity, along with a commitment by Government not to use policy or executive intervention to protect sectional interests, particularly those of state enterprises. If the state's reason for entering the sector is that even under conditions conducive to investment in African markets, foreign investment remains elusive, then logically it should not be concerned about competition though recent cable developments already undermine this rationale.

This paper has sought to locate broadband developments in the context of global reform trends and has juxtaposed that with domestic political and social transformation of the sector. It has sought to move beyond the fruitless pursuit of purely economic solutions that have clearly not been bought into in the past and are unlikely to be in future, to explore the political barriers to reform. Purely economic solutions often strip the context of their political content, leaving sector policy in limbo between the unfeasible purist positions on the market or state as drivers of delivery. Acknowledging the political dimensions of the problem, allows for engagement on the basis of agreed-upon policy objectives and the best strategies and institutional arrangements to achieve these within the constraints they impose. □

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INTERVIEWS

- Tracy Cohen, Councillor; Independent Communications Authority of South Africa.
- Alec Erwin, Minister of Public Enterprises, Government of South Africa.
- Mandla Langa, former Chairperson of the Independent Communications Authority of South Africa.
- Paris Mashile, Chairperson of the Independent Communications Authority of South Africa.
- Andile Ngaba, former Director General, Department of Communications.
- Godfrey Oliphant, MP African National Congress, outgoing chairperson of the Parliamentary Portfolio Committee on Communications.
- Ajay Panday, Managing Director; Neotel.
- Lyndall Shope-Mafole, Director General, Department of Communications.
- Dene Smuts, MP Democratic Alliance, Parliamentary Portfolio Committee on Communications.